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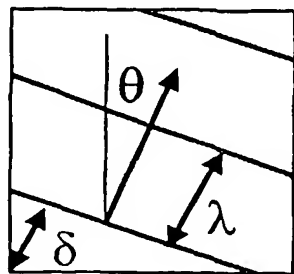
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(54) Title: PATTERN-BASED INTERCHANGE FORMAT



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(57) **Abstract:** An approach for the compression of images such as fingerprints may involve a resolution reduction of an image before forming a cellular representation of the resulting resolution-reduced image. A given fingerprint image is divided into a number of finger pattern cells. Each finger pattern cell is then compared to each finger pattern cell in a set of predetermined finger pattern cells to find a close match. The set of closely matching predetermined finger pattern cells forms the cellular representation. The cellular representation may then be used as a basis for a finger pattern interchange data format for use with pattern-based fingerprint matching algorithms. The finger pattern interchange data comprises an identification of the predetermined finger pattern cells that most closely approximate the finger pattern cells that make up the fingerprint image.

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